NPLCC S-TEK Subcommittee Meeting May 8, 2011

- 1:30 1:45 Welcome, introductions, update on action items (Frank Shipley)
- 1:45 -2:55 Focus on FY12 priorities: Status report from tech. teams and NPLCC staff
- 2:55 4:00 Focus on Science Strategy

Action items from April 5th meeting/call.

| Action | Who | When |
|--|---|---|
| Volunteer / nominate reviewers for TEK proposals | All | Nominations to Mary Mahaffy by April 27th |
| Develop proposal review process | Frank S., Mary M., and Karen J. | By May 8 th meeting; STEK will discuss and finalize process on call |
| Develop recommendations for a data management platform; arrange for demonstration of recommended platform | Data management platform technical team (additional volunteers welcome) | First call April 16 th Develop recommendations for discussion on May 8 th STEK call |
| Convene GIS team and begin work | GIS technical team (additional volunteers welcome) | First call April 23 rd Update to STEK on May 8 th call |
| Provide input on potential science and information sharing workshops and symposiums the NPLCC should consider supporting in FY12 | All | Suggestions to Mary Mahaffy by May 1st |
| Review and provide comments on the decision support context: management decisions and outcomes of interest (Appendices C and D) | All | Comments and suggestions to Karen Jenni by May 1 st |
| Review and provide comments on proposed goals/objectives for the Science Strategy (pages 5-6 of this summary) | All | Comments and suggestions to Karen Jenni by May 1 st |
| Provide links, descriptions, and/or contacts for related science strategies affecting the NPLCC region | All | Information to Mary Mahaffy by May 25 th |

FY 12 Priorities Update

- RFP Update Mary Mahaffy, NPLCC
- Terrestrial Habitat Project Dan Siemann, NWF
- GIS Data Layers Update Tom Miewald, USFWS
- Data Management Platform Tom Miewald & Sean Finn, GNLCC
- Workshops and Symposiums All

RFP Proposal Review Schedule

- Proposals are due by COB 5/16
- Proposals posted for review by 2:00 pm on 5/17
- Proposal review 5/17 to 5/24
- NPLCC staff & Karen collate evaluations & prepare summary (5/25)
- Reviewers WebEx on 5/29 or 5/30 dev. Recommended list
- Steering Committee meeting likely June 1
- Notify applicants by June 4
- Approx. 2 weeks complete agreement packages

NWF/NPLCC Focus Groups

- Workshop held in Juneau, Alaska on April 20
- 43 attendees
 - 18 from Tribes/First Nations (42%)
 - 15 from Federal agencies (35%)
 - 6 from Academia (14%)
 - 4 from NGOs or other groups (9%)
- Science needs for aquatic and terrestrial ecosystems
- Science-support needs across region

NWF/NPLCC Focus Groups: Next Steps

- Web-based focus groups (230 invites sent so far)
 - May 17, 1-3 PM PST: Coastal Temperate Rainforest Ecosystems
 - May 18, 10 AM to Noon PST: Lowlands, Prairies, and Other Nonforested Ecosystems
 - May 22, 10 AM to Noon PST: Interior Mountain Ecosystems
- In-person workshop
 - June 11, Arcata or Redding CA
 - Title: Expert Workshop to Inform Climate Change Science
 Priorities in the NPLCC Spotlight on Terrestrial Ecosystems
- Draft focus groups report mid-July, final mid-August
- Finalize marine and freshwater reports, produce terrestrial reports from September 2012 to May 2013

GIS Technical Team

Team Members

- Tom Miewald USFWS
- Eric Bergey USFWS
- Joe Bernert OSU/INR
- Kathryn Boyer NRCS
- Ann Braaten NPS
- Dominick Della Sala Geos Institute
- Kelly Christiansen USFS, PNW
- Peter Eldred USFS, PNW
- Kathleen Moore Canadian Wildlife Service
- Frank Shipley USGS
- Mary Mahaffy NPLCC

Technical Team Goals:

- Identify the status of "Foundational" and "Secondary" geospatial data sets to support conservation in the LCC region.
- Compile and synthesize best available data and associated metadata. Make the metadata and data accessible to LCC partners.
- 3. Prioritization of data needs across the region.
- 4. Identify means for sharing and updating this analysis.

Foundational Data Sets

- Climate Change Information
 - Basic climate information
 - Predicted climate models (Regional models)
 - More information on specific ecological attributes related to climate change. For example: stream flows, temperature, etc.
- Digital Elevation Models (DEMs)
 - 10 meter/LiDAR based
- Hydrology
 - Stream Network/ Watershed
- Land Cover/Vegetation
- Satellite or Aerial Imagery
- Roads/Transportation
- Estuarine/Near-shore Data
- Geology/Geomorphology
- Ownership and Land Management

- "Secondary" Data Sets: (data sets that are not typically core data sets in a GIS Clearinghouse, more specialized data to conservation)
 - Species distribution / habitat models => which species?
 - Biodiversity Information: element occurrence data, critical habitat,
 - Watershed and watershed condition data
 - Climate vulnerability models
 - Conservation priority areas from other exercises (for example: TNC portfolios, Important Bird Areas
 - Existing and planned alternative energy systems (likely wind)
 - Monitoring data.
 - Landscape condition/Ecological footprint analysis/Human Footprint.

Data Gap Assessment

- Monthly web-ex/conference calls will be set up for the GIS Technical Team.
- Include Decision Support Tools (NetMap, etc)
- Meetings with Ecotrust, TNC, others who have assessed the region.

NPLCC Data Management Technical Team

LCC Benchmark for Data Mgt and GIS

"The LCC has developed a shared data and information platform to accumulate and deliver foundational data, conduct data gap assessments, provide a repository and tracking mechanisms for modeling, research, or other science projects and has worked with neighboring LCCs to ensure data/information development and management follow established best practices and policies"

Members:

- Erin Stockenberg, USFWS I & M Data Manager
- Jennie Hoffman, EcoAdapt
- Tom Miewald, USFWS
- Other potentials: BC Conservation Data Centre, CSC?

Goal:

- Identify Data Management Needs and Platform for NPLCC.
- Work towards increased coordination and communication around data and uses.

Data Mgt. Platform Selection

Top candidates for selection as a LCC data mgt. platform Need more information

| information | | | | | | | | | | | | | | | |
|---|-------------------|--|---|---|---|--|--|---------------------------------|----------------------------|---|--|-----------------------------------|-------------------|------------------------------------|-------|
| eet one or more co example of a data | | planner needs | | | Promote/Sponser | | | | | 1 | I | | | | |
| | | , | | | | | | | | | | | | | |
| | | Data Management and Sharing Platforms Avian National | | | | | | | | | | | | | |
| | | | | | | | | | | | | | Knowledge | Phenology | |
| | | DataBasin | LC-MAP | Northwest Knowledge Net | BISON | TNC Conservation Gateway | NPS IRMA / IRIS | Western Landscapes Exp | VegBank | NOAA Digital Coast | FWS IRIS- ServC/ | PRBO- Various | | Network | eBird |
| | | | | NKN's mission is to make | | | | | | Access to data | | | | | |
| | | | | research data more accessible, comprehensible, | | | | | | managed by the NOAA Coastal Services Center | | | | | |
| | | Data Basin is a free system that | The Landscane Conservation | usable and secure for data | | | | | | is provided through the | | | | | |
| | | connects you with spatial | Management and Analysis | providers and data users, and | | | | | | Data Access Viewer, | | | | | |
| | | | Portal, LC MAP, provides a | to facilitate data usage across | | | | | | which allows for user- | | | | | |
| | | | collaborative virtual workspace allowing partners of | the disciplines by promoting commonly accepted policies, | BISON will leverage the | | | | | specified geographies, formats, and | the beginning of a web-based "one- | Various online | | | |
| | | | the Great Northern LCC to | standards, and protocols; | accumulated human and | | | | | resolutions. Other data | stop" for resource- | mapping, decision | | | |
| | | | securely share, access, and | facilitating the application of | infrastructure resources | | the beginning of a web-based | | | sets are provided | related data and | support tools for | | | |
| | | data sources, upload and publish | | modeling, mining, simulation | of the long-term USGS | The Gateway is a website for the conservation practitioner, scientist and | "one-stop" for resource- | | | through various | information, including | | | Goto | |
| | | your own datasets, connect to | information to further coordinated research. | and visualization tools; and | investment in research | decision-maker. Here we share the | related data and information, | | | mechanisms maintained | | planners, | | http://www.usan pn.org/node/105 | |
| | | | management, and resource | supplying data and computing services that are adaptive to | and data management and delivery of biological | best and most up-to-date information we use to inform our conservation | including reports and other documents, data sets, maps, | Need more info, still a work in | Mainly for vegetation plot | by their agencies of responsibility. Have an | documents, data sets, maps, images, | conservation practitioners and | | 75 to see | |
| Description | on . | that can be easily shared. | conservation. | changing data storage and | and geospatial data. | we use to inform our conservation work. | images, links, and more. | progress. | data | idea for a data set you | links, and more. | scientists | | webinar | |
| | | | | Note: Need more info | | | | | | | | | | | |
| | | | | | | | | | | | | | | http://www.usan | |
| Vebsite | | www.databasin.org | http://greatnorthernicc.org/icm | http://www.idahoepscor.org/Dra | http://bicon.org/goul | http://www.conservationgateway.o | lette cultime and acultinal | | www.vegbank.org | http://www.csc.noaa.govi | under development de | lette.lldsts.mbo.org | loado2lindou nha? | pn.org/us/ws/nw | |
| website | | www.databasat.org | ncp.ngreamormenicc.orgicin | i incpriwww.idanoepscor.orgibra | nttp://disort.orni.gov/ | Intpriwww.conservationgateway.c | поралиналра-дом геррі | | www.vegbalik.org | Intp.nwww.csc.noaa.govi | under development de | intpinuata pribolorg | caucziniuex.prip: | 13_eucation | |
| | | | | The Idaho National Laboratory, | | | | | | | | | | | |
| l | | | | Idaho EPSCoR and the | | | | | | NOAA | | | | | |
| Developer | | Conservation Biology Institute | USUS | University of Idaho | USGS | TNC | National Park Service & USFWS | SIGN | ESA | NUAA | FVS | PRBO & California | Avian Data Cente | ľ | |
| Data Repo | ositor¶/Storag | ues | Yes | Yes | Yes | Yes | Yes | | Yes | Yes | Yes | Yes | | | |
| | | | | | | | | | | | | | | | |
| Data Shar | | u. | Mar. | W | | W | U | | Yes | | No. | 0 | | | |
| Policies a | nd Processes | Yes | Yes | Yes | 7 | Yes | Yes | | Yes | No | Yes | Yes | | | |
| | pdate Data | ?? | Yes | No | ? | No | No | | No | No | No | Yes | | | |
| | | | | | | | | | | | | | | | |
| Data Anal | ysis and Mode | yes | yes, embedded in ArcGIS | Yes, unclear of specifics | No | No | No | | No | No | No | Yes | | | |
| Data View | ing/Visualizati | nor. | ues | Yes | 2 | No | No | | Limited | No | No | Yes | | | |
| Data Fiew | iligi visualizati | yes | yes | 163 | | 100 | 140 | | Limited | 140 | 140 | 163 | | | |
| Data Disc | | | | | | | | | | | | | | | |
| | to holdings | | yes | yes | yes | yes no | yes | | Yes | yes | Yes | Yes | | | |
| Multiple A | to holdings | | yes, via ScienceBase Yes | no Yes | no Yes | no Somewhat | No, No, | | No Yes | no No | No | | | | |
| i-sussiple A | , <u>,</u> | | | | | | | | | | | | | | |
| | | | | INSIDE Idaho (GIS | | | | | | | | | | | |
| | | | | clearinghouse), NW CSC, Fire Research And Management | | | | | | | | | | | |
| | | | | Exchange System, Initiative for | | | | | | | | | | | |
| | | | | Bioinformatics and | | | | | | | | | | | |
| Adopted b | · y | ?, but several projects from differ | Great Northern LCC | Evolutionary Studies, NSF | Beta Version | TNC | NPS, USFWS I&M are developing | ng something similar | Several, but not universal | NOAA | FWS I&M | Multiple Partners | | | |
| C | | | | | | | | | | | | | | | |
| Support | | | | | | | | | | | | | | | |
| Data Acce | ess | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |
| Spatial Ex | tent Limitatio | No | No | No | ? | No | US Only? | | | US Only? | No | No | | | |
| Cost | | | | | | | | | Free | | | | | | |
| Space | limitations | | | | | | | | | | | | | | |
| | nce/Managem | low | low | 2 | Inw | | | | | | | | | | |

Attributes of a Data Mgt. System

- Data repository
- Data Sharing
 - Policies and Processes
 - Security
- Edit and Update
- Data Analysis
- Data Discovery, internal and external.
- Adoption
- Support Needed
- Cost
- Outreach and Networking
- Data Type (spatial, non-spatial, qualitative, all)
- Software required

Results

- Top Selections:
 - LC-MAP
 - DataBasin
- Need more information, or still in development:
 - NKN
 - Western Landscapes Explorer
- Enhanced systems (capabilities we'd like to see)
 - PRBO, CalAdapt

- Other systems
 - BISON
 - NPS IRMA/IRIS
 - VegBank
 - NOAA Digital Coast
 - Avian Knowledge Network
 - National Phenology Network
 - eBird
 - Etc, etc..

LC-MAP

- LC-MAP was chosen because:
 - Adoption from neighboring LCCs
 - Analysis capabilities
 - Integration with ScienceBase
 - Opportunities to customize
 - Will meet short-term needs most effectively
- Will continue to work towards enhanced capabilities.

Next Steps

- Implementation of LC-MAP
 - USGS contract
 - Other work needed
- Other aspects of Data Management
 - Data standards
- User needs workshops/focus groups
- Get people to start using system, feedback.

Data Mgt: One Year From Now?

- NPLCC Funded data is online and accessible.
- Partners are actively using LCC data and becoming aware that the LCC provides resources.
- Better understanding of needs in the region.
- Data Manager?
- Closer integration with CSCs, others.
- Towards improved capacity for data users and resource managers.

Workshops and Symposiums

Proposed for FY12

- Cross-boundary Data Integration Workshop to be held in Vancouver this year (hosted by ACRC last year) (estimated cost \$30k)(FY11)
- PNW Climate Science Conference (Boise, ID) (\$5k)(FY11)
- Data Management Focus Group (Jennie Hoffman has details)
- Transboundary Forum (WA & BC)— Habitat connectivity to be cosponsored by the Great Northern LCC (\$10k)
- WildLinks (at North Cascades Inst., North Cascades NP) (\$4k)(FY11)
- Others?